

Dr. Peter C. Kong

Phone: 208.526.7579 **Email**: peter.kong@inl.gov

Education

Dr. Peter Kong earned his B.S. in Chemistry, Mathematics and Physics at Lincoln University; M.S. in Chemistry from the University of North Carolina at Greensboro; and his Ph.D. in Metallurgy and Materials Science at the University of Minnesota.

Experience and Achievements

Mr. Hubbell is an advisory scientist at the Idaho National Laboratory, where he has worked since 1985. Prior to joining the INL, he was a water resource specialist for the New Mexico Environmental Improvement Division for three years.

Kong began his career at INL in 1990 as the technical leader for research in plasma processing. From 1985 to 1990, he was a research faculty member in the Mechanical Engineering Department at the University of Minnesota. He has more than 25 years of experience in thermal plasma synthesis and processing materials. Dr. Kong's research is primarily focused on industrial plasma process development. His research areas include plasma technology development for natural gas conversion to high value liquids, heavy oil upgrade, black liquor gasification and white liquor chemicals recovery. He has published more than 40 invited and contributed papers in plasma material and plasma waste processing. Dr. Kong served as program and session chairman for several international plasma conferences. He was also selected as the 2005 INL Inventor of the Year.

INL'S LIFETIME ACHIEVEMENT AWARD FOR INVENTORSHIP

Patents

- U.S. Patent 5,427,747 Method and Apparatus for Producing Oxygenates from Hydrocarbons
- U.S. Patent 5,626,726 Method for Cracking Hydrocarbon Compositions Using a Submerged Reactive Plasma System
- U.S. Patent 5,749,937 Fast Quench Reactor and Method
- U.S. Patent 5,906,757 Liquid Injection Plasma Despsition Method and Apparatus
- U.S. Patent 5,935,293 Fast Quench Reactor Method
- U.S. Patent 6,103,948 Solid Catalyzed Isoparaffin Alkylation at Supercritical Fluid and Near-Supercritical Fluid Conditions
- U.S. Patent 6,451,706 Process for Producing an Aggregate Suitable for Inclusion into a Radiation Sheilding Product
- U.S. Patent 6,187,226 Thermal Device and Method fro Production of Carbon Monoxide and Hydrogen by Thermal Dissociation of Hydrocarbon Gases
- U.S. Patent 6,372,156 Methods of Chemically Converting First Materials to Second Materials Utilizing Hybrid-Plasma Systems
- U.S. Patent 6,395,197 Hydrogen and Elemental Carbon Production from Natural Gas and other Hydrocarbons
- U.S. Patent 6,606,855 Plasma Reforming and Partial Oxidation of Hydrocarbon Fuel Vapor to Produce Synthesis Gas and/or Hydrogen Gas
- a LLC Datant 6 939 073. Diagna Cynthogic of Lithium Parad Intervalation Douglavy for Calid Dalymay Electrolyte Datan